

WHAT IS CLAIMED IS:

1. An isolated paramyxovirus comprising a nucleic acid molecule hybridizing under stringent conditions to SEQ ID NOS: 3, 7 and 8.

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2. An isolated paramyxovirus comprising polypeptides having at least 90% identity to SEQ ID NOS: 9, 10, 11, 12, 13 and 14 using a GAP algorithm with default parameters.

3. An isolated paramyxovirus comprising an identifying characteristic selected from the group
10 consisting of: (a) a nucleic acid molecule hybridizing under stringent conditions to SEQ ID NOS: 3, 7 or 8 a reverse complement thereof; (b) a nucleic acid sequence having at least 90% identity with SEQ ID NOS: 3, 7 or 8 using a GAP algorithm with default parameters or a reverse complement thereof; (c) a nucleic acid sequence encoding a polypeptide having amino acid sequences depicted in SEQ ID NOS: 9, 10, 11, 12, 13 or 14 or reverse complement thereof and (c) a polypeptide having at least
15 90% identity with a polypeptide having amino acid sequences depicted in SEQ ID NOS: 9, 10, 11, 12, 13 or 14 using a GAP algorithm with default parameters.

4. The isolated paramyxovirus of claim 3, wherein said virus comprises a nucleic acid molecule corresponding to SEQ ID NOS: 3, 7 or 8 a reverse complement thereof.

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5. The isolated paramyxovirus of claim 3, wherein said virus comprises a polypeptide sequence comprising a polypeptide sequence having an amino acid sequence selected from the group consisting of SEQ ID NOS: 9, 10, 11, 12, 13 and 14.

25 6. An isolated antibody that binds to an epitope of the isolated paramyxovirus of claim 3.

7. The antibody of claim 6, wherein said antibody is a polyclonal antibody or a monoclonal antibody.

8. An isolated nucleic acid molecule comprising (a) a nucleic acid sequence hybridizing under
30 stringent conditions to a nucleic acid sequence SEQ ID NOS: 3, 7 and 8; (b) a nucleic acid sequence having at least 90% identity to a nucleic acid sequence comprising SEQ ID NOS: 3, 7 and 8; (c) a nucleic acid sequence encoding a polypeptide having at least about 90% identity to a polypeptide comprising SEQ ID NOS: 9, 10, 11, 12, 13 or 14.

9. An isolated nucleic acid molecule comprising SEQ ID NOS: 3, 7 and 8.
10. A nucleic acid construct comprising the isolated nucleic acid molecule of claim 8.
- 5 11. A vector comprising the nucleic acid molecule of claim 8.
12. A host cell comprising the nucleic acid molecule of claim 8.
13. An isolated nucleic acid molecule comprising a nucleic acid sequence encoding a polypeptide
10 comprising SEQ ID NOS: 9, 10, 11, 12, 13 or 14.
14. A method for producing a polypeptide comprising SEQ ID NOS: 9, 10, 11, 12, 13 or 14 comprising (a) culturing the host cell of 12 and (b) isolating said polypeptide from said cultured cell.
- 15 15. An isolated polypeptide comprising a polypeptide sequence having at least 90% identity to SEQ ID NOS: 9, 10, 11, 12, 13 or 14.
16. The isolated polypeptide according to claim 15 wherein said polypeptide comprises a polypeptide sequence depicted in SEQ ID NOS. 9, 10, 11, 12, 13 or 14.
- 20 17. The polypeptide according to claim 16, wherein said polypeptide comprises SEQ ID NO:9.
18. The polypeptide according to claim 17, wherein said polypeptide is encoded by nucleotides 16-1038 of SEQ ID NO:3.
- 25 19. The polypeptide according to claim 16, wherein said polypeptide comprises SEQ ID NO:10.
20. The polypeptide according to claim 19, wherein said polypeptide is encoded by nucleotides 90-1582 of SEQ ID NO:7.
- 30 21. The polypeptide according to claim 16, wherein said polypeptide comprises SEQ ID NO:11.
22. The polypeptide according to claim 21, wherein said polypeptide is encoded by nucleotides 1393-3039 of SEQ ID NO:8.

23. The polypeptide according to claim 16, wherein said polypeptide comprises SEQ ID NO:12.

24. The polypeptide according to claim 23, wherein said polypeptide is encoded by nucleotides 90-
5 967 of SEQ ID NO:7.

25. The polypeptide according to claim 16, wherein said polypeptide comprises SEQ ID NO:14.

26. The polypeptide according to claim 25, wherein said polypeptide is encoded by nucleotides 109-
10 591 of SEQ ID NO:7.

27. A method for detecting a Chris-like virus comprising contacting a virus particle with the antibody of claim 6 under conditions to form a complex with a virus particle and detecting the complex, wherein the presence of the complex indicates the presence of said virus.

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28. The method according to claim 27, wherein said virus particle is obtainable from a biological sample.

29. A method of detecting the presence or absence of a Chris-like virus in a subject, comprising
20 contacting a nucleic acid molecule from a sample from a subject with at least one primer or probe derived from the nucleic acid molecule of claim 8 and detecting the presence or absence of said virus nucleic acid molecule in said sample to detect the presence or absence of said virus.

30. The method according to claim 29, wherein said method further comprises isolating nucleic acid
25 from said subject.

31. A method of detecting the presence or absence of a Chris-like virus nucleic acid sequence in a sample comprising contacting the sample with a probe derived from the nucleic acid molecule of claim 8 under conditions in which the polynucleotide with selectively hybridize to said virus nucleic
30 acid sequence and detecting hybridization of the nucleic acid molecule in said sample, wherein the detection of the hybridization indicates the presence of virus in the sample

32. A method for detecting the presence or absence of a Chris-like virus nucleic acid molecule in a sample from a subject, comprising: (a) contacting the sample with at least one primer derived from

the nucleic acid molecule according to claim 8 to provide an amplification mixture wherein said primer is sufficient in length to selectively hybridize to said virus nucleic acid sequence and wherein said primer is capable of amplifying a detectable part of a virus nucleic acid if said virus is present in the sample; (b) subjecting the amplification mixture to nucleic acid amplification and (c) detecting
5 whether a part of a virus nucleic acid molecule has been amplified wherein detection of a part indicates the presence of virus in the sample.

33. The method according to claim 32, wherein said nucleic acid amplification is polymerase chain reaction.

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34. A method for monitoring treatment or progression of a disease or disorder resulting from Chris-like virus infection in a subject, comprising (a) contacting a sample from a subject periodically with a primer or probe derived from the nucleic acid molecule of claim 8 and (b) periodically determining the amount of virus present in said subject.

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35. The method according to claim 34, wherein the amount of the nucleic acid molecule present in said sample is determined by PCR or nucleic acid hybridization.

36. An agent that modulates the replication of the paramyxovirus of claim 1.

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37. The agent according to claim 36, wherein said agent is selected from the group consisting of a peptide, peptide analog, polynucleotide, a ribozyme and a small interfering RNA (siRNA).

38. The agent according to claim 37, wherein said agent modulates the expression of a nucleic acid
25 molecule hybridizing under stringent conditions to a nucleic acid molecule comprising SEQ ID NOS: 3, 7 or 8.

39. A composition comprising the nucleic acid molecule of claim 8 and a carrier or excipient.

30 40. A composition comprising the antibody of claim 6 and a carrier or excipient.

41. A composition comprising the polypeptide of claim 15 or immunogenic fragment thereof and a carrier or excipient.

42. A composition comprising the agent of claim 36 and a carrier or excipient.

43. A composition comprising the paramyxovirus of claim 3.

5 44. The composition of claim 43, wherein said paramyxovirus is an attenuated or inactivated virus.

45. A method of treating or preventing a viral infection resulting from a paramyxovirus infection comprising administering to said subject in need thereof the agent of claim 36 in an amount effective to treat said viral infection.

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46. A method of inhibiting replication of a paramyxovirus comprising administering to a subject in need thereof the antibody of claim 6 in an amount effective to inhibit replication of said paramyxovirus.

15 47. A method of inhibiting replication of a paramyxovirus comprising administering to a subject in need thereof the polypeptide of claim 15 or immunogenic fragment thereof.

48. A method of modulating tumor growth in a subject in need thereof comprising administering to said subject the paramyxovirus of claim 1 in an amount effective to modulate said tumor growth.

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49. A method for identifying an agent effective for modulating replication of paramyxovirus comprising comparing the effect of the agent of claim 36 and candidate agent on modulation of the replication of paramyxovirus.

25 50. A kit comprising at least one primer or probe derived from the nucleic acid molecule of claim 8

51. The kit according to claim 50, wherein said primer or probe is labeled with a detectable label.

52. The kit according to claim 50, wherein said kit comprises a plurality of primers or probes.

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53. The kit according to claim 50, wherein said primers or probes are attached to a solid support.

54. The kit according to claim 50, wherein said kit further comprises enzymes.

55. A kit comprising at least one polypeptide consisting of at least 10 amino acids found in a linear array of the isolated protein or polypeptide of claim 16.

56. The kit according to claim 55 wherein said polypeptide comprises a detectable label.

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57. The kit of claim 55, wherein said polypeptide is attached to a solid support.

58. The kit of claim 55, wherein further comprises one or more immunochemical reagents.

10 59. A nucleic acid molecule comprising a chris-like virus nucleic acid sequence operably linked to a heterologous nucleic acid sequence encoding a heterologous protein.

60. A host cell comprising the nucleic acid molecule of claim 59.

15 61. A method of obtaining a heterologous protein comprising culturing the host cell of claim 60 and isolating said heterologous protein.